

Fewer Marriages, More Divergence: Marriage Projections for Millennials to Age 40

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Abstract

Declining marriage rates suggest a growing fraction of millennials will remain unmarried through age 40. In this brief, we use data from the American Community Survey to estimate age-specific marriage rates and project the percentage of millennials who will marry by age 40 in different scenarios. We find that the percentage of millennials marrying by age 40 will fall lower than for any previous generation of Americans, even in a scenario where marriage rates recover considerably. Moreover, marriage patterns will continue to diverge by education and race, increasing the divides between mostly married “haves” and increasingly single “have-nots”.

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Most Americans eventually marry, but the percentage that do not has slowly increased across generations. In 1990, 91 percent of US-born women age 40 (early baby boomers) had married. This value decreased to 87 percent in 2000 (late baby boomers) and 82 percent in 2010 (generation X). For the millennial generation, there is concern that declines in marriage might be even sharper, because the economic shock of the recession put marriage on hold for many young adults and marriage rates are returning only slowly (if at all) to pre-recession levels.

This brief is part of an Urban Institute study of the millennial generation—its diversity, demographics, and implications for policy. In this brief, we examine recent age-specific first marriage rates for American men and women, then use standard demographic techniques to project how many will marry by age 40 in two plausible scenarios. If marriage rates remain at recession or postrecession levels, the number of millennials who marry by age 40 could decrease as much as 12 percentage points below the level among 40-year-olds today. In an alternative scenario, even if marriage rates bounce back substantially, the percentage of millennials marrying by age 40 will still decrease below the level for any previous generation of Americans. Furthermore, under both scenarios there will be a continuing divergence in marriage patterns by education and race, increasing the social and economic divides between the still mostly married “haves” and the increasingly single “have-nots”.

What Have We Done?

We calculate and graph the age-specific first marriage rates for American men and women for the past several years, looking specifically at race, ethnicity, and educational attainment. Our collection of marriage rates serves as a timely indicator of recent trends and the current state of marriage. In contrast, other measures (such as the percentage married at age 18–30) have an inherent lag because they contain the results of previous years’ marriage rates, and therefore are less useful for measuring precise trends.

We also use age-specific marriage rates to project future marriages out to age 40 for the millennial generation. The millennial generation, defined as Americans born between 1980 and 1990, is currently in its early 20s to early 30s, ages at which it can be difficult to tell whether delays in marriage will lead to later marriages or no marriages at all. We chose to project the proportions of persons who would marry by age 40, a point far enough into the future to capture most but not all marriages, but not so far as to strain the believability of the projections.

We use two projection scenarios, motivated by an interest in projecting the likely influence of the recent recession on millennial marriages. The economic shock of the recession put marriage on hold for many American young adults, and in the prolonged aftermath of the recession, marriage rates have not yet returned to pre-recession levels. Because we are now in the sixth year after the recession with still depressed economic opportunities for many young adults, our projection scenarios estimate how many millennials would stay single if either 1) marriage rates were to stay at their present levels, or 2) marriage rates were to rebound back to pre-recession levels, and if pre-recession marriage rates are further adjusted upward to reflect how the postrecession composition of the population of singles now contains a higher fraction of individuals who desire to marry but have been unable to do so (appendix A provides technical details). (In this brief, we refer to the entire time period of 2008 through 2012 as “postrecession” although it technically refers to both the recession and the postrecession periods.)

The scenarios we use reflect our best guesses of what is likely to happen, but they do not fully reflect all possible futures. For example, our results show clearly that declines in marriage rates did not start with the recession but have been trending downward since at least 2000. If future marriage rates continue in this long-term decline, far fewer millennials will marry by age 40 than we project. Conversely,

marriage rates have risen significantly several times in the history of the United States, such as from 1940 to 1960 and from 1890 to 1910 (Fitch and Ruggles 2000). A major resurgence in marriage culture is possible, and some have strongly supported that it will happen (Hymowitz et al. 2013).

We use data from the American Community Surveys for our analysis and projections, cross-checked against data from the 2000 US Census and 1994 through 2013 March Current Population Surveys.¹ The American Community Surveys for 2006 through 2012 include respondents living in group quarters and in other households, so those form the basis for our projections for the whole population. For visual representations of marriage rates over time, we use the longer time series of 2000 through 2012 data from the US Census and American Community Surveys, for non-group quarters households only (about 97 percent of the population). Using data without group quarters populations for projections would bias the overall estimates because many group quarters populations have different marriage proportions than the overall population. However, we found no evidence that such bias shifted over time, so the trends in rates estimated from the non-group quarters population are likely to be an accurate representation of the trends for the whole population.

What We Found

Figure 1 shows first marriage rates for single US-born women at each year of age from 20 to 40 and demonstrates how marriage rates have decreased since the millennium. In the early millennium period (2000–2004) the peak rate was .099, indicating that among never-married single women age 25 in 2000–2004, just under 10 percent would have married a year later at age 26. In the immediate pre-recession period (2004–2008) the peak rate was .088, and in the recession-and-after period (2008–2012) the peak rate was .075. During and after the recession, the peak marriage rate was well below the pre-recession level, but this decline was already going on before the recession.

Figure 1 also shows that marriage rates did not decrease equally at all ages. Rates went down a lot at young adult ages populated by the millennial generation, but they also declined at older ages populated by members of generation X. The millennial generation was mostly in its twenties across these time periods, and the broadest vertical gaps between the time periods were at ages 20 to 25. generation X was mostly in its early thirties across these time periods, and marriage rates also declined at these ages. At ages 36 and older, marriage rates went up a little after the recession, a possible sign that some single women in their late thirties were “catching-up” after postponing marriage through a decade of declining marriage rates.

Figure 2 shows first marriage rates, for Single USUS-born men at each year of age from 20 to 40. A close visual comparison to figure 1 shows that the age at the peak marriage rate runs about 2 years later for men than for women, and declines in marriage rates after age 30 were less pronounced than the declines for women at these ages. Apart from that, there is little difference in the overall marriage trend for men, compared to the trend in for women.

Figure 3 uses the marriage rates in figure 1 to produce projections of the percent of US-born women married by Age 40, by generation (Gen X to late millennial) and by either of two projection scenarios. The small-dotted line shows the projection scenario in which marriage rates stay at the low postrecession levels of 2008–2012. Although marriage rates are not projected to decline any further, living through adulthood at these stable low marriage rates would cause only 69.3 percent of US-born women to marry by age 40. Put another way, if 30.7 percent of US-born women were to remain unmarried

¹ Online access to these data available thanks to Ruggles et al. (2010).

by age 40, this would be more than half again as many singles as we currently observe for generation X (18.0 percent) and an unprecedented increase in the single population of the United States. As a reminder, this is what will happen if marriage rates stay the same, rather than continuing to decrease as they have done since 2000.

The solid line in figure 3 shows an alternative projection scenario in which marriage rates rebound (the “catch-up” scenario). This alternative series assumes that catching-up on first marriage rates would involve a return to the higher age-specific marriage rates preceding the recession, plus an additional shift to higher rates because the recession has changed the composition of the never-married population by adding many persons who would have already been married were it not for the recession. This shift from chronological to compositional marriage rates moved our marriage rates back not only 4 years in time, but also back 1 to 4 years in age (depending on the increase in the proportion of women who remained single at each year of age after the start of the recession). For late millennials under this scenario, the percent who ever marry will be 76.8 percent, higher than in the baseline scenario but still well below the (current historical record low) 82.0 percent for generation X women born in 1970 who reached age 40 in 2010.

In comparison to figure 3 for women, figure 4 shows projected marriage patterns for US-born men. Both the observations and the projections for men who ever marry are about 4.5 percentage points below the levels for women, reflecting the fact that some never-married women marry previously married men, but fewer never-married men marry previously married women. In other respects, the projection series are comparable for women and men.

Projection series for separate racial and ethnic groupings are shown in figures 5–8. The results for these projections are also summarized in tables 1 and 2. A pattern of divergence is evident across the racial and ethnic comparisons in figures 5–8. Hispanic women, non-Hispanic black women, and non-Hispanic women of other racial origin are projected to have steeper decreases in marriage than non-Hispanic white women. For men, the patterns are similar, except that the trends for non-Hispanic white men are slightly steeper than those for non-Hispanic other men. Figure 6 is noteworthy because under one set of projections (the “baseline” scenario), fewer than half of non-Hispanic black women and men will have married by age 40.² Overall, racial and ethnic differences in marriage are projected to be more pronounced for millennials than for any previous generation. This projected pattern of racial and ethnic divergence in marriage is very likely to occur, given that it is strongly predicted by both projection scenarios.

Projection series across education levels are shown in figures 9 and 10. Across educational levels, those without a 4-year degree are projected to have much steeper decreases in marriage than those with a 4-year college degree or more. All of these patterns of difference are evident at the start of the time series, consistent with the large literature on diverging destinies for American families (McLanahan 2004). Our marriage projections both scenarios predict that diverging educational destinies are continuing (and possibly accelerating) in the millennial generation. This projected pattern of educational divergence in marriage is very likely to occur, given that it is strongly predicted by both projection scenarios and for both men and women.

Our analysis has highlighted diversity of marriage rates across groups of millennials. Our results project steep declines in marriage for racial and ethnic minorities and for lower-educated groups. However, given that much of previous media attention on millennials has been on the middle class, often college-educated group, college graduates merit a brief discussion. Our findings suggest that in the

² The projection that marriage rates will fall more for black women than for black men is possibly surprising, but is consistent with the fact that men’s marriage rates tend to peak at later ages.

baseline and catch-up scenarios, respectively, college graduate millennials (women and men) are either slightly less or no less likely to marry than the generation preceding them. This finding for college graduate millennials is in contrast to the frequently discussed hardships of this cohort through the recession: facing brutal job markets after completing college, postponing marriage because of student debt, often returning home after they complete college, and (for women) suffering the effects of unfavorable sex ratios during and after college, which can limit their choice of partners and (according to some) create a toxic environment for the development of healthy relationships (Uecker and Regnerus 2010).

Our projections indicate little or no decrease in the percent of college graduates marrying by age 40. Part of this is because the age patterns of first marriage for college graduates. College graduates have marriage rates that peak later and stay high longer than those of less educated women and men, giving college graduates a greater likelihood of withstanding years of “drought” in economic conditions unsuitable for marriage; they then return to marriage when conditions are again suitable. However, year-to-year marriage rates for college graduates have been declining for college graduates throughout the millennium, and if poor economic conditions persist then the proportions ever marrying will decline steeply for college graduates as well.

While the demographics of marriage rates explain part of the racial and educational divergence in marriage patterns among the millennials, a larger part of the difference is likely differences in social and economic experiences. Racial and ethnic minorities and lower educational groups have been hit much harder by economic and social changes in the new millennium, including the effects of reaching young adulthood at the time of a severe recession. With respect to marriage at least, our projections indicate that many of these millennials will not recover in the future from the opportunities they have missed as young adults.

In conclusion, the marriage projections of this analysis carry two broad policy messages:

1. The singles are coming. Marital status directly affects policies and programs such as tax rates, eligibility for entitlement programs, and the availability of social safety nets. A rapidly growing single population will bring significant changes in the needs, costs, and opportunities of many policies and programs—changes our nation can adapt to more successfully if it anticipates them.
2. Support for both single-parent families and marriage will be a challenge. In a society divided between the still mostly married “haves” and the increasingly single “have-nots,” policies and safety net programs for poor families and individuals must efficiently target the needs of the unmarried poor without disincentivizing marriage for those among the poor who would still marry. Future marriage trends are likely to make this challenge more difficult.

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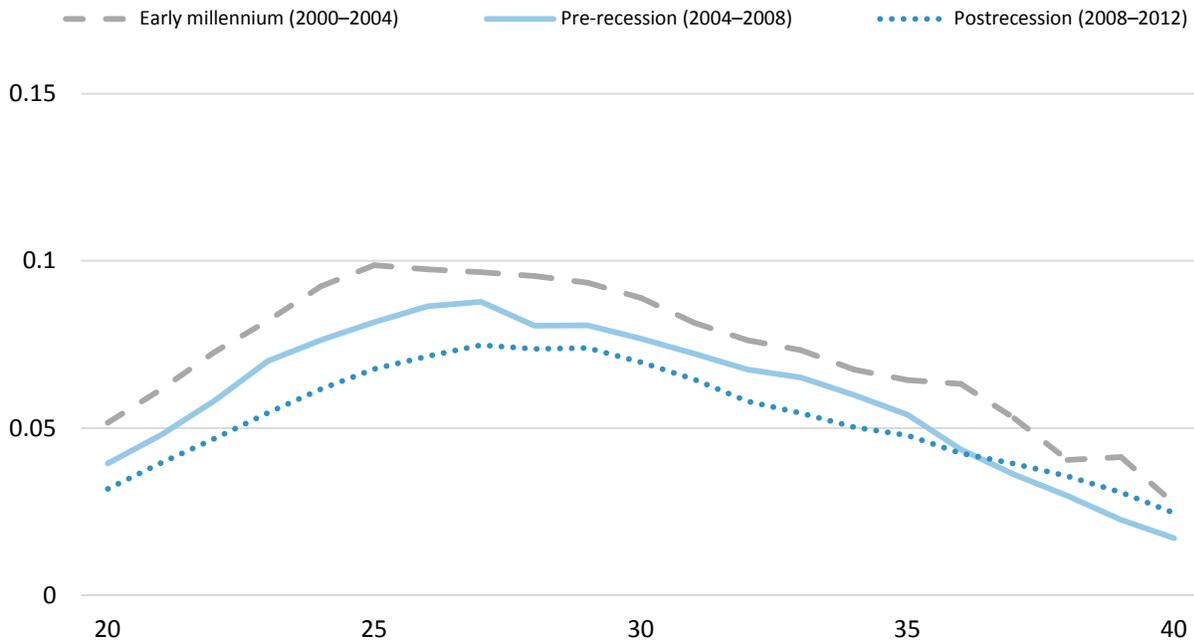
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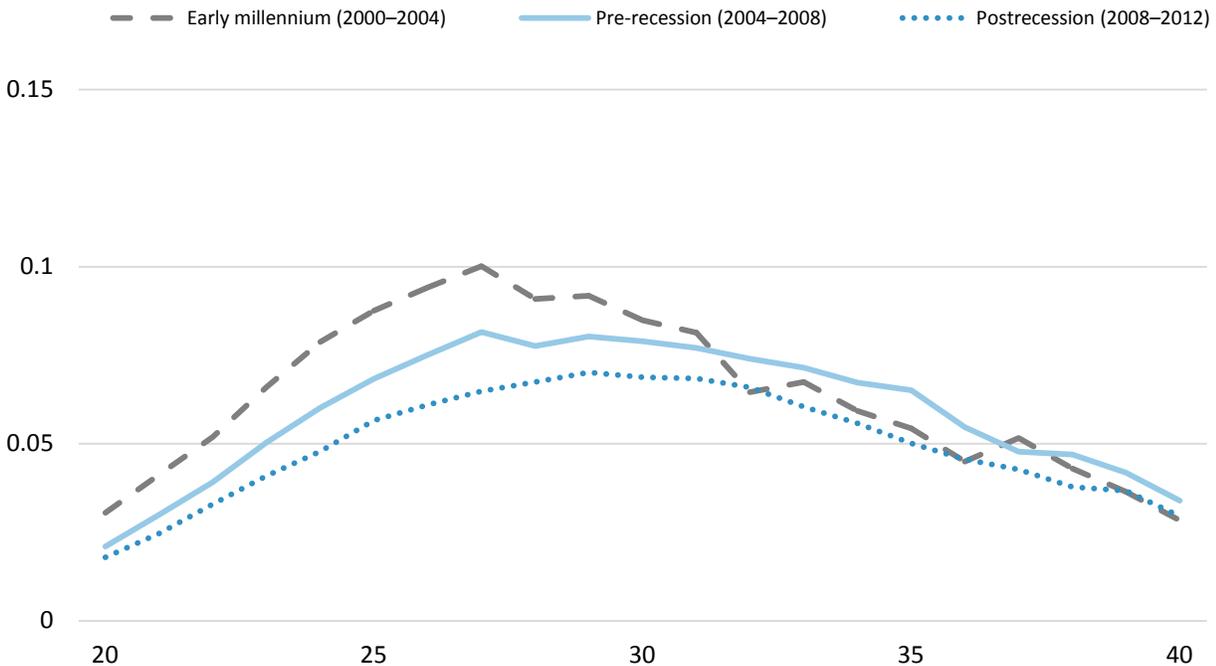
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Figure 1. First Marriage Rates Since 2000, for Each Year of Age from 20 to 40, US-born Single (Never Married) Women



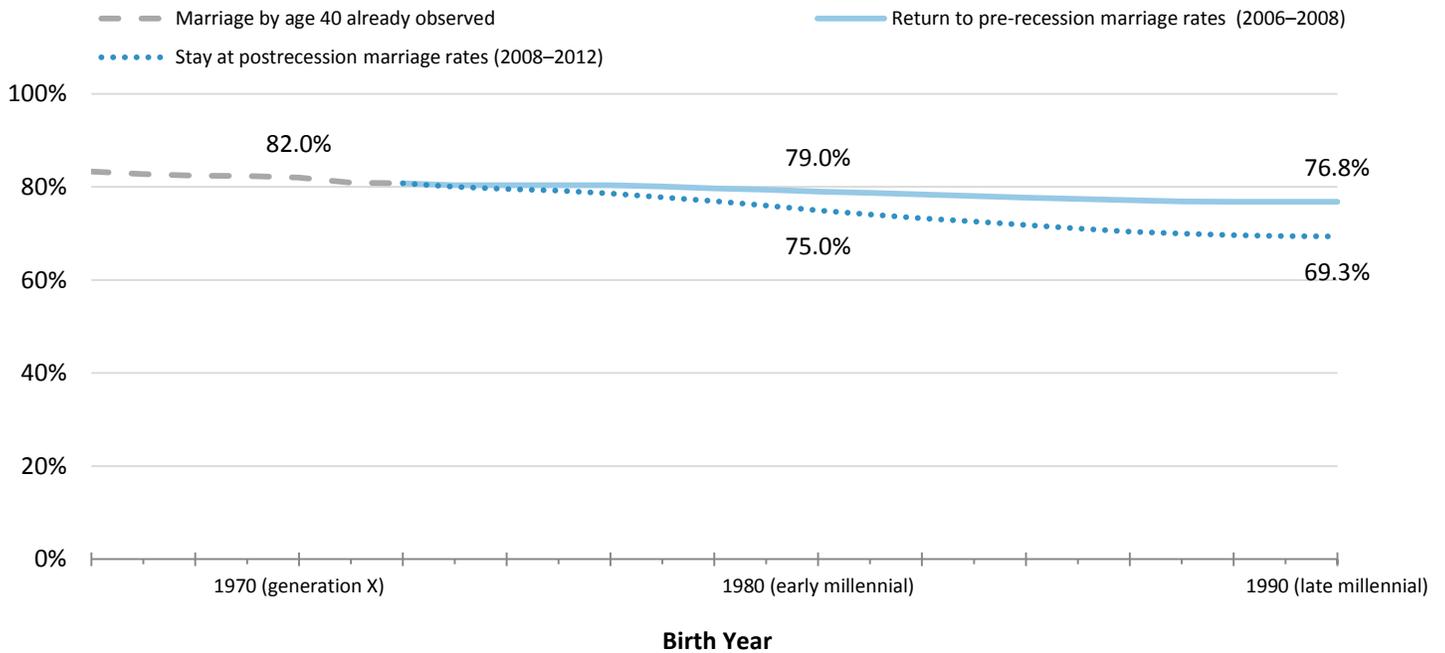
Source: 2001–2012 American Community 1-year surveys and 2000 US Census 1% microsample.
 Note: Samples limited to non-group quarters households only.

Figure 2. First Marriage Rates Since 2000, for Each Year of Age from 20 to 40, US-born Single (Never Married) Men



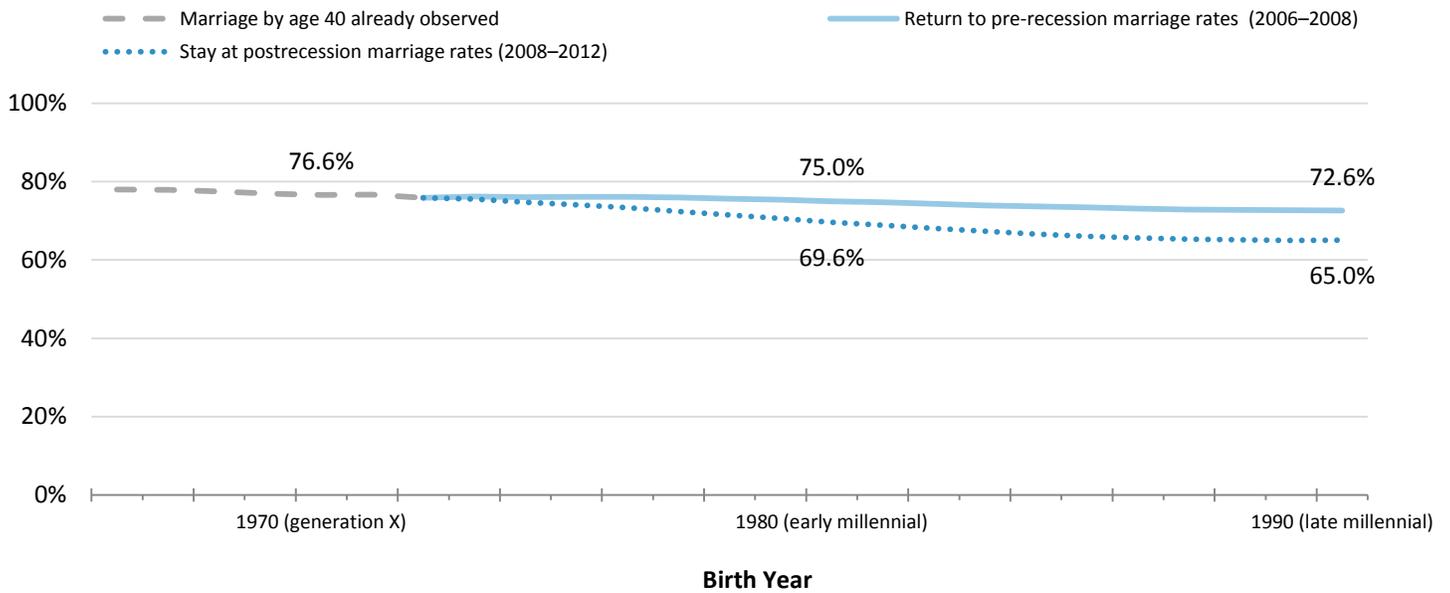
Source: 2001–2012 American Community 1-year surveys and 2000 US Census 1% microsample.
 Note: Samples limited to non-group quarters households only.

Figure 3. Projected Percent of US Women Who Will Have Ever Married by Age 40, by Generation



Note: Return to pre-recession marriage rates includes “catch-up” adjustment for population composition.

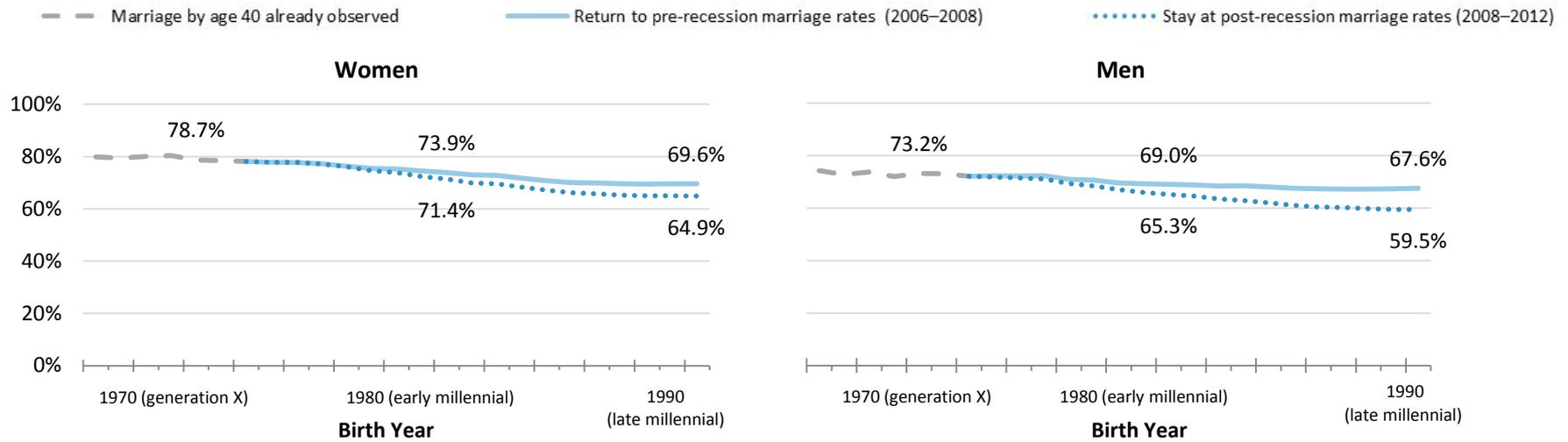
Figure 4. Projected Percent of US Men Who Will Have Ever Married by Age 40, by Generation



Source: 2006–2012 American Community Survey 1-Year Samples.

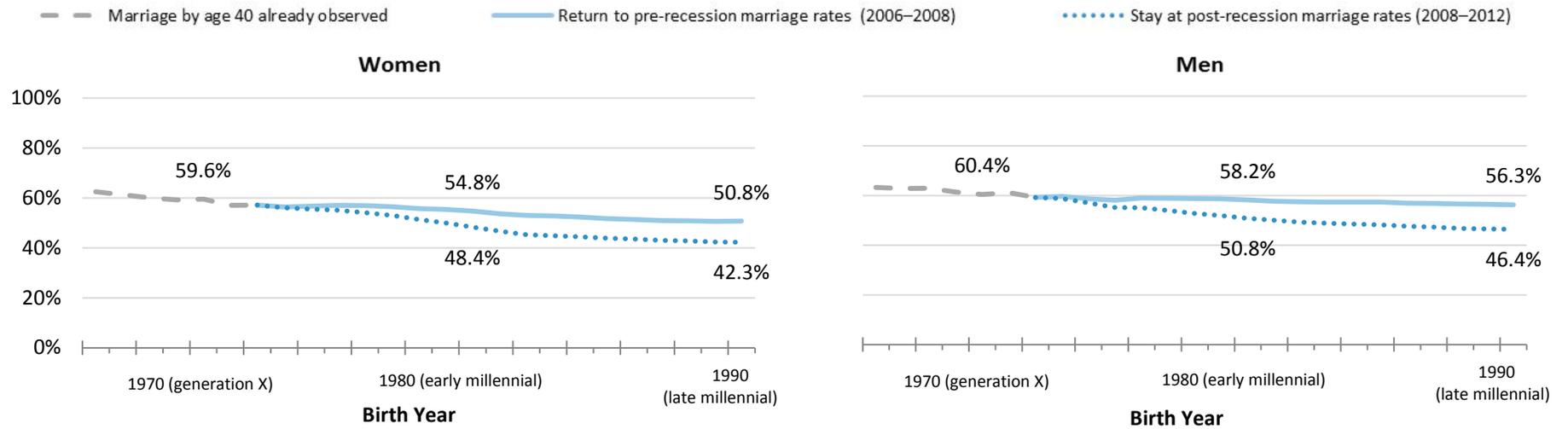
Notes: Samples include both group quarters and non-group quarters households. Return to pre-recession marriage rates includes “catch-up” adjustment for population composition.

Figure 5. Single US-born Women and Men of Hispanic Ancestry



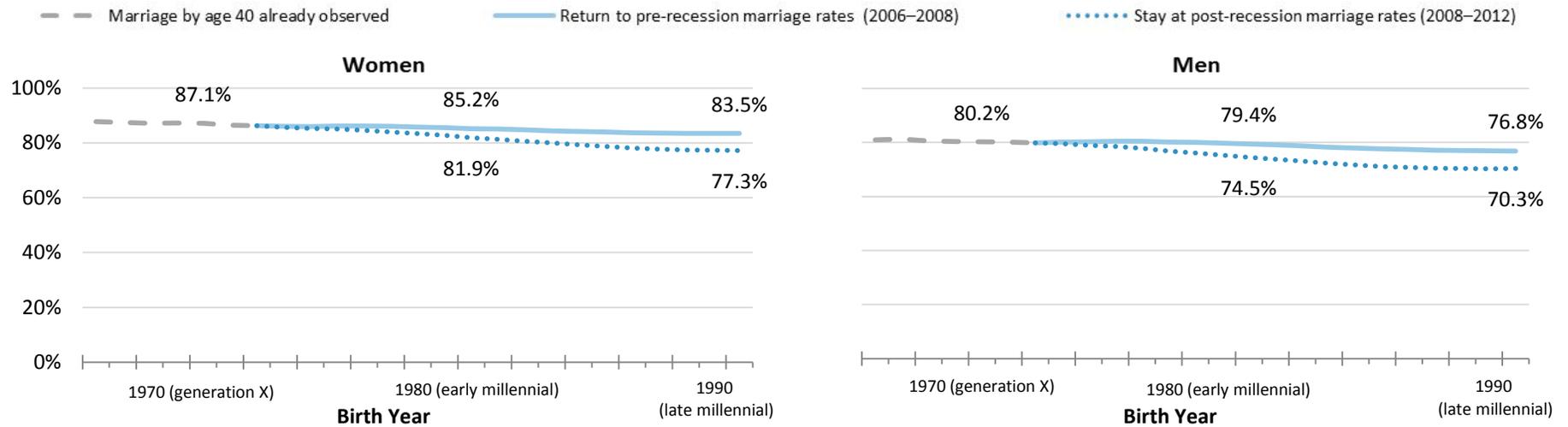
Note: Return to pre-recession marriage rates includes “catch-up” adjustment for population composition.

Figure 6. Single US-born Non-Hispanic Black Women and Men



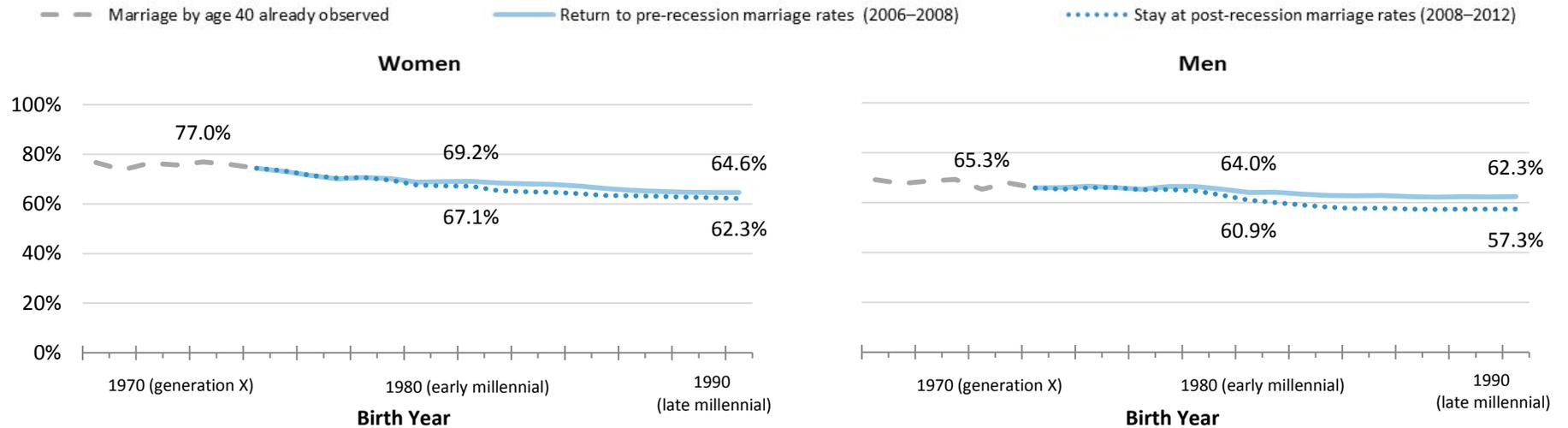
Note: Return to pre-recession marriage rates includes “catch-up” adjustment for population composition.

Figure 7. Single US-born Non-Hispanic White Women and Men



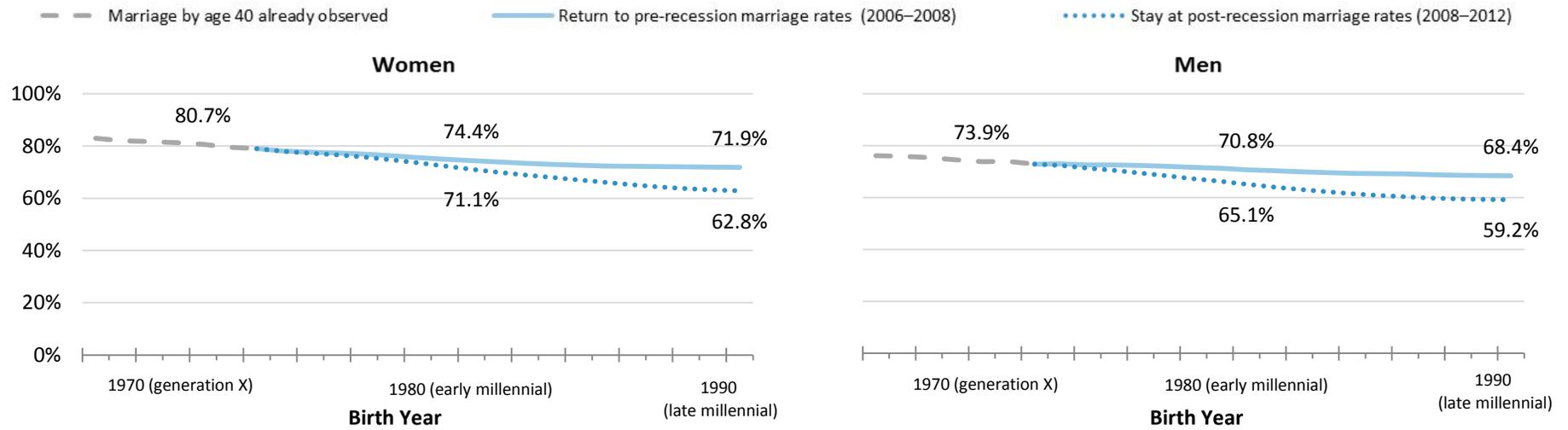
Note: Return to pre-recession marriage rates includes “catch-up” adjustment for population composition.

Figure 8. Single US-born Non-Hispanic Other (Nonblack, Nonwhite) Women and Men



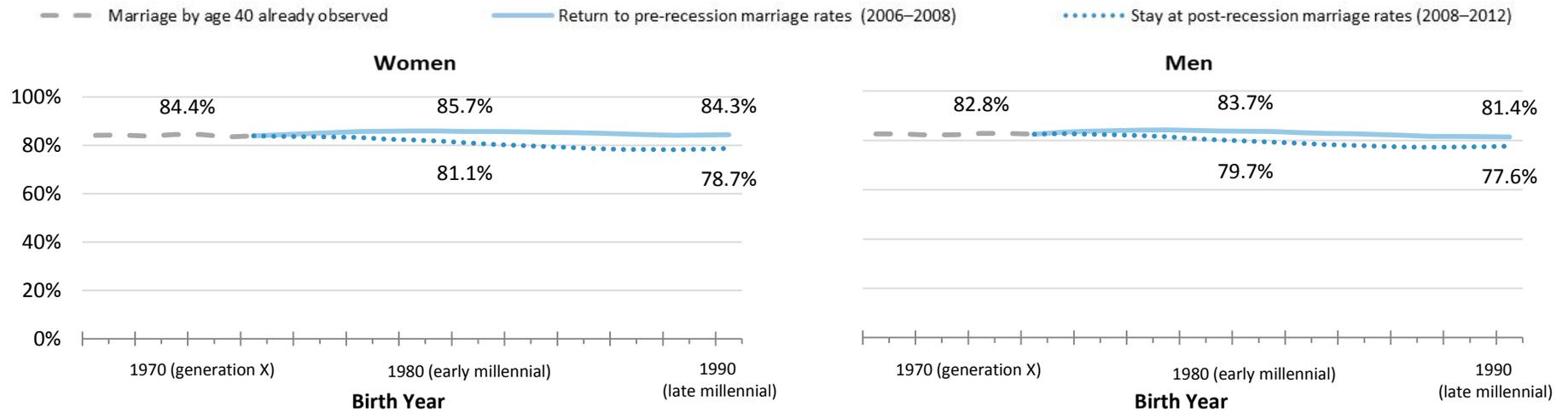
Note: Return to pre-recession marriage rates includes “catch-up” adjustment for population composition.

Figure 9. Single US-born Women and Men with No 4-year Degree



Note: Return to pre-recession marriage rates includes “catch-up” adjustment for population composition.

Figure 10. Single US-born Women and Men with a 4-year Degree



Note: Return to pre-recession marriage rates includes “catch-up” adjustment for population composition.

Table 1. Projection of US Women and Men Who Will Have Ever Married by Age 40, by Demographic, Baseline Projection (percent)

	Generation X (born 1970, observed 2010)	Early millennials (born 1980, projected to 2020)	Late millennials (born 1990, projected to 2030)	Projected trend 2010 to 2030
US Women at Age 40				
Born in US				
All	82.0	75.0	69.3	-12.7
Hispanic	78.7	71.4	64.9	-13.8
Non-Hispanic black	59.6	48.4	42.3	-17.3
Non-Hispanic white	87.1	81.9	77.3	-9.8
Non-Hispanic other	77.0	67.1	62.3	-14.7
No 4-year degree	80.7	71.1	62.8	-17.9
4-year degree or more	84.4	81.1	78.7	-5.7
Born outside US	85.2	N/A	N/A	N/A
US Men at Age 40				
Born in US				
All	76.6	69.6	65.0	-11.6
Hispanic	73.2	65.3	59.5	-13.7
Non-Hispanic black	60.4	50.8	46.4	-14.0
Non-Hispanic white	80.2	74.5	70.3	-9.9
Non-Hispanic other	65.3	60.9	57.3	-8.0
No 4-year degree	73.9	65.1	59.2	-14.7
4-year degree or more	82.8	79.7	77.6	-5.2
Born outside US	80.4	N/A	N/A	N/A

Source: 2006–2012 American Community Survey 1-year samples.

N/A is not applicable.

Notes: Baseline projection assumes postrecession first marriage rates (2008–2012) at each year of age to year 2030. Samples include both group quarters and non-group quarters households. Projections of future marriage are not attempted for the foreign-born population because year to year marriage rates cannot be reliably estimated.

Table 2. Projection of US Women and Men Who Will Have Ever Married by Age 40, by Demographic, “Catch-up” Projection (percent)

	Generation X (born 1970, observed 2010)	Early millennials (born 1980, projected to 2020)	Late millennials (born 1990, projected to 2030)	Projected trend 2010 to 2030
US Women at Age 40				
Born in US				
All	82.0	79.0	76.8	-5.2
Hispanic	78.7	73.9	69.6	-9.1
Non-Hispanic black	59.6	54.8	50.8	-8.8
Non-Hispanic white	87.1	85.2	83.5	-3.6
Non-Hispanic other	77.0	69.2	64.6	-12.4
No 4-year degree	80.7	74.4	71.9	-8.8
4-year degree or more	84.4	85.7	84.3	-0.1
Born outside US	85.2	N/A	N/A	N/A
US Men at Age 40				
Born in US				
All	76.6	75.0	72.6	-4.0
Hispanic	73.2	69.0	67.6	-5.6
Non-Hispanic Black	60.4	58.2	56.3	-4.1
Non-Hispanic White	80.2	79.4	76.8	-3.4
Non-Hispanic Other	65.3	64.0	62.3	-3.0
No 4-year degree	73.9	70.8	68.4	-5.5
4-year degree or more	82.8	83.7	81.4	-1.4
Born outside US	80.4	N/A	N/A	N/A

Source: 2006–2012 American Community Survey 1-year samples.

N/A is not applicable.

Notes: “Catch-up” scenario assumes a return to pre-recession (2006–2008) first marriage rates at each year of age, including adjustment for postrecession population composition, to year 2030. Samples include both group quarters and non-group quarters households. Projections of future marriage are not attempted for the foreign born population, because year to year marriage rates cannot be reliably estimated.

Appendix A. Details of the Methodology

We calculated year-to-year and age-to-age first marriage rates using two methods. First, we counted the never-married population $N_{(X,Y)}$ at age X and year Y and the never-married population $N_{(X+1,Y+1)}$ at age $X+1$ and year $Y+1$, then estimated the (discrete) annual rate of marriage $R_{(x,y)}$ for every year of age and year as shown in equation 1.

$$1) \quad R_{(x,y)} = (N_{(X,Y)} - N_{(X+1,Y+1)}) / N_{(X,Y)}$$

Second, we also calculated first marriage rates for the years 2008 through 2012 using two variables introduced in 2008 to the American Community Survey, the number $M_{(X+1,Y+1)}$ of persons who said they were married in the past 12 months at age $X+1$ and year $Y+1$, and the number of times they had ever been married. For the population at each year and age that had not been married 2 or more times, we estimated the (discrete) annual rate of marriage $R_{(x,y)}$ for every year of age and year as shown in equation 2.

$$2) \quad R_{(x,y)} = M_{(X+1,Y+1)} / (M_{(X+1,Y+1)} + N_{(X+1,Y+1)})$$

Each method of estimating the first marriage rate has its own problems. The method in equation 1 involves the subtraction of two independent quantities that are very close to each other, especially at ages over 30, so those marriage rates have a lot of random variation. The method in equation 2 has the problem that marriages reported “in the past 12 months” across successive years and ages consistently add up to slightly more than the ever-married population at the final age and year, possibly because some marriages were reported as occurring in the past 12 calendar months even if the exact anniversary date had passed at the time of the interview. Consequently, marriage rates estimated by equation 2 produced smoother estimates across ages and years than rates estimated by equation 1, but the rates estimated by equation 2 were also consistently a few percentage points too high. As a compromise solution, we averaged the rates across the two methods, producing marriage rate estimates that were relatively smooth but probably slightly higher than for the true population. We then smoothed the estimates further by averaging the rates across 4-year time periods. For visual representation but not projections, we also smoothed the estimates within each time period as a five-year-of-age running average. (We also tried estimates and projections with slightly more complicated equations that approximated the continuous marriage rates instead of the discrete annual rates above. Our projection results were not affected.)

Once we calculated the age- and year-specific marriage rates for our samples, we began our projection exercise to estimate the percentage of each population that would marry by age 40 for different generations of Americans. For the years 2006 to 2012, we were able to observe directly the proportion of the sample ever-married by age 40, which we averaged using ages 38 to 42 for each year. Consequently, we had direct observations for marriage by age 40 for Americans born between 1966 and 1972, a generation generally identified as generation X. For Americans born 1973 and later, we took the percentage married at the oldest observed age (averaging across a span of +/- 2 years), then simulated new first marriages for each year of age out to age 40 with the first marriage rate for each year of age. Consequently, for the population of early millennials born in 1980 who reached the millennium at age

20, we have observed percentages of ever-married, married individuals out to age 32 and projected first marriages for those age 33 to 40. For the population of late millennials born in 1990, we have observed percentages of ever-married, married individuals out to age 22 and projected first marriages for those age 23 to 40. Our marriage projections therefore take late millennials as far as the year 2030, when they will reach age 40.

For the baseline projection series, we made our projections using age-specific first marriage rates, averaged across the postrecession years 2008–2009, 2009–2010, 2010–2011, and 2011–2012. This estimation series shows what will happen if marriage rates remain at low postrecession levels through at least 2030.

We also estimated an alternate series to simulate what will happen if millennials immediately (starting in 2013) started catching up on marriages missed during the low-marriage-rate years of the recession. This alternate series uses age-specific marriage rates averaged across the pre-recession years 2006–2007 and 2007–2008, which is as far back as we can go with data that include group quarters populations. (We tried a sensitivity analysis using 2004–2005 and 2005–2006 data from the group quarters—only samples of the American Community Survey, and the results were substantively the same.) This alternative series also makes a more important adjustment, assuming that catching up on first marriage rates would involve not only a return earlier, higher age-specific marriage rates, but also a shift to higher rates consistent with the larger fraction of individuals who remained single each year. This shift from chronological to compositional marriage rates moved our simulations not only back in time, but also back in age from 1 to 4 years depending on the increase in the proportion of women who remained single at each year of age after the start of the recession. This age shift also had the effect of compensating for pre-recession declines in marriage rates dating back to at least 2000. Our motivation in adding this shift was that previous demographic projections of marriage or childlessness (c.f. Bloom 1982) have subsequently proven incorrect because they did not allow that delays in marriage and childbearing change the population composition in ways that increase marriage and fertility rates at older ages.

Appendix B. Marriage Trends in the Foreign-Born Population

Throughout this paper, we have examined only the US-born population because the year-to-year estimation procedures and projections are not appropriate for the foreign-born population. For a simple description of the non-US-born population since 2000, table B.I shows statistics on marital status by age. Trends from 2000 to 2012 for non-US-born persons indicate that the same decline in marriage is occurring in the non-US-born population, particularly among non-US-born millennials. The mechanisms for this decline are likely to be different in some ways than for the native-born population, and projections for marriage in the non-US-born population cannot be made from this data.

Table B.I. US Residents Born Outside the US Never Married, by Age and Year (percent)

Age	Year 2000	Year 2005	Year 2010	Year 2012	2000–2012 trend
Women					
23–27	57.0	54.8	46.5	43.5	-13.5
28–32	80.4	75.4	70.3	68.3	-12.1
33–37	83.8	85.6	80.3	80.0	-3.8
38–42	89.0	88.9	85.3	85.3	-3.7
Men					
23–27	38.3	37.7	28.1	26.2	-12.1
28–32	66.5	63.9	55.5	54.4	-12.1
33–37	78.7	78.8	72.5	72.2	-6.5
38–42	86.2	86.1	82.1	80.8	-5.4

Source: 2000 Census and 2005–2012 American Community Survey.

Note: Data is for Non-group quarters population only.